UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
RADTKE, MARK A

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 January 2008*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-30* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Remarks

1.   In response to communications filed on 3 January 2008, claim(s) 1 and 11 is/are

amended per Applicant's request. Therefore, claims 1-30 are presently pending in the

application, of which, claim(s) 1, 11 and 21 is/are presented in independent form.

2.   While considering the claims, it was discovered that a rejection should be made

under 35 U.S.C. 101. Since these new grounds of rejection were not necessitated by

Applicant's amendments, this Office Action is non-final.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

4.   Claims 11-20 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. The claims fail to place the invention squarely

within one statutory class of invention. In paragraph [0583], lines 8-13 of the instant

specification, applicant has provided evidence that applicant intends the "medium" to

include signals ("program code that is transmitted over some transmission medium"). As

such, the claim is drawn to a form of energy. Energy is not one of the four categories of

invention and therefore this claim(s) is/are not statutory. Energy is not a series of steps

or acts and thus is not a process. Energy is not a physical article or object and as such

is not a machine or manufacture. Energy is not a combination of substances and

therefor not a composition of matter.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bernstein et al. ("The Microsoft Repository") in view of Bernstein v2 ("The Microsoft

Repository Version 2 and Open Information Model", cited by Applicant).

As to claim 1, Bernstein et al. teaches a method for manipulating a plurality of

discrete units of information, Items, in a hardware/software interface system of a

computer system (see Abstract), said method comprising:

associating each of said Items (see page 6, left column, bullet 2, Repository

Object) with one or more Relationships, the one or more Relationships including

Holding Relationships that control the lifetime of a target Item (see page 6, left column,

bullet 4, Relationship Object, "represents a connection" and see page 9, left column,

paragraph 2, "Delete methods..."), each one or more Relationships being between a

source Item and a target Item, the target Items each having an associated reference

count;

determining the lifetime of each target Item based on the associated reference

count if a Holding Relationship is associated between the source Item and target Item

(see page 9, left column, paragraph 2, lines 3-9 and see page 3, section 2.2, "Count");

storing each target Item based on the lifetime determined from the reference

count (see page 9, left column, paragraph 2, lines 3-9, "However, if the delete

propagation flag is set...").

Bernstein et al. does not explicitly teach wherein the one or more Relationships

includes Embedding Relationships that enable modeling of compound Items; and

preventing a Holding Relationship between the source Item and the target Item if

an Embedding Relationship currently exists between the source Item and the target

Item.

Bernstein v2 teaches wherein the one or more Relationships includes

Embedding Relationships that enable modeling of compound Items (see pages 13-14,

section 6.1, "Version Model", wherein "Embedding" is read on "version"); and

preventing a Holding Relationship between the source Item and the target Item if

an Embedding Relationship currently exists between the source Item and the target

Item (See page 15, section 6.3, "Workspace Model", paragraphs 2-3, "However, there

can be at most one version of an object in each workspace." Thus, if a workspace

implements one version of an object, then the application would prevent a Holding

Relationship between two objects of the same version because a workspace could not contain both versions).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made because Bernstein v2 "subsumes" Bernstein et al. (see Bernstein v2, page 1, footnote 1). Since they describe different versions of the same software, the techniques taught by the older reference are directly applicable to the teachings of the newer reference.

As to claims 2, 12 and 22, Bernstein et al., as modified, teaches wherein each Relationship from among said plurality of Relationships constitutes, at the hardware/software interface system level, a mapping between a pair of Items that said Relationship interconnects (see page 6, left column, bullet 4, Relationship Object, "represents a connection between **two** repository objects", emph. added).

As to claims 3, 13 and 23, Bernstein et al., as modified, teaches wherein each Relationship has properties (see page 6, left column, bullet 4, Relationship Object, "A relationship can have properties").

As to claims 4, 14 and 24, Bernstein et al., as modified, teaches wherein each Relationship comprises a target property for the identification of the target Item of said Relationship (see page 8, left column, section "Relationship Objects", paragraph 3, line 5, "The repository object [...] you traverse to is called the target" and see figure 4).

As to claims 5, 15 and 25, <u>Bernstein et al.</u>, as modified, teaches wherein each Relationship further comprises an ownership property corresponding to an ownership of said target Item (see page 6, figure 2, "Owner" and see page 11, section 5, paragraph 2, line 6, "Owner").

As to claims 6, 16 and 26, <u>Bernstein et al.</u>, as modified, teaches wherein the hardware/software interface system automatically establishes a Relationship between each pair of Items in which each of the Items in the pair of Items has a common value for a common property (See page 8, right column, paragraphs 2-3 and see figure 5. "IrepositoryObject assigns the same name to that Name property and to all naming relationships to that object." Using named relationships, each Relationship established will have a common value ("the same name") for a common property (Name)).

As to claims 7, 17 and 27, <u>Bernstein et al.</u>, as modified, teaches wherein the hardware/software interface system automatically establishes a Relationship between each pair of Items in which each of the Items in the pair of Items has a common property (See page 5, left column, section 2.2, paragraph 3 and see pages 7-8, spanning paragraph. Properties are inherited from Interfaces to Repository Objects).

As to claims 8, 18 and 28, <u>Bernstein et al.</u>, as modified, teaches wherein each Item has an Item type, and the hardware/software interface system automatically

establishes a Relationship between each pair of Items in which each of the Items in the pair of Items has the same Item type (See figure 2. IProject and IProjectItem are related and both contain Projects).

As to claims 9, 19 and 29, <u>Bernstein et al.</u>, as modified, teaches wherein each Item has an item type, and the hardware/software interface system automatically establishes a Relationship between each pair of Items in which each of the Items in the pair of Items has a common parent Item type (See pages 7-8, section 3.3, particularly paragraph 3. The class hierarchy establishes Relationships between siblings).

As to claims 10, 20 and 30, <u>Bernstein et al.</u>, as modified, teaches wherein the hardware/software interface system automatically establishes a Relationship between each pair of Items based on a user-defined parameter (see page 9, left column, section "Support for IUnknown", line 4, "custom interfaces").

As to claim 11, <u>Bernstein et al.</u> teaches a computer-readable medium with computer-readable instructions for a hardware/software interface system for a computer system (see Abstract),

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 1 above.

As to claim 21, <u>Bernstein et al.</u> teaches a hardware/software interface system, for use in a computer system (see Abstract),

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 1 above.

Response to Arguments

7.   Applicant's arguments filed on 3 January 2008 with respect to the rejected claims in view of the cited references have been fully considered but are moot in view of the new grounds for rejection.

In response to Applicant's arguments that <u>Bernstein v2</u> does not teach "preventing a Holding Relationship between the source Item and the target Item if an Embedding Relationship currently exists between the source Item and the target Item," the arguments have been fully considered but are not deemed persuasive.

An Embedding Relationship exists if two objects are of the same type, but of different versions. Two objects of the same type cannot exist in the same workspace ("[T]here can be at most one version of an object in each workspace", page 15, section 6.3, paragraph 3, lines 2-3). Thus, a Holding Relationship (i.e. a Relationship Object with the delete propagation flag set) cannot be established between two objects of the same type but different versions. If an event is not possible under the constraints of the repository system, then it is "prevented".

Conclusion

8.   Any inquiry concerning this communication or earlier communications should be
directed to the examiner, Mark A. Radtke. The examiner's telephone number is (571)
272-7163, and the examiner can normally be reached between 9 AM and 5 PM,
Monday through Friday.

      If attempts to contact the examiner are unsuccessful, the examiner's supervisor,
Jeffrey Gaffin, can be reached at (571) 272-4146.

      Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to Customer Service at (800) 786-9199.

maxr
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31 March 2008

/Christian P. Chace/
Supervisory Patent Examiner, Art Unit 2169